

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID21469
Project Name	Project - Smart Waste management system for metropolitan cities
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Smart Waste management system for metropolitan cities</p> <p>To create a hygienic environment in metropolitan cities and to enable efficient waste collection and management.</p>
2.	Idea / Solution description	To create an integrated application using IoT and mobile application so that the level for the waste can be monitored in real-time.
3.	Novelty / Uniqueness	The Ultrasonic sensor that is embedded inside the dustbin can produce ultrasound which can repel the animals, hence preventing animal contact.
4.	Social Impact / Customer Satisfaction	This is an initiative towards the Swachh Bharath scheme to make the metropolitan cities more hygienic and environment friendly.
5.	Business Model (Revenue Model)	<p>Product : SmartBins</p> <p>Potential Clients : Municipalities and corporations</p> <p>Services : Maintenance of the SmartBins</p> <p>The SmartBins are rented to the corporations and municipalities on a contract basis. Maintenance and other services will be charged accordingly.</p>
6.	Scalability of the Solution	<p>The solution contains a Server to store all incoming data from the IoT enabled SmartBins. This is stored in a centralised Database and processed.</p> <p>The mobile Application fetches all the data from the server.</p> <p>Hence Scalability is achieved through centralisation.</p>